

Work Order ID 67990

Tuesday, April 05, 2011 10:42:51 AM

Page 1

Item ID: D4380-7
Revision ID: PRELIM
Item Name: Cover, Safety Hard Point

Accept

Setup Start

Stop

Start Date: 4/5/2011 Start Qty: 2.00
Required Date: 4/5/2011 Req'd Qty: 2.00

Cust Item ID:
Customer:

PRELIMINARY ISSUE

Reference:

Approvals: Process Plan: *MF* Date: *11-04-05* Tooling: Date:
QC: Date: SPC (Y/N): Date:

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D4380

~~PA6 PA7~~ *OK 11/04/05*

0.00

0.00

0.00

0.00

100

HandThermo

Memo

1-Cut Sheet to required Blank size

105

HandThermo

Dry Material

Memo

Dry Sheet as per QSI022 Kydex

Temp: *150*Time IN: *6:00 PM 11/04/05*Time OUT: *7:00 AM 11/04/05**2**BB 11/04/05**2**BB 11/04/05*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 67990

Tuesday, April 05, 2011 10:42:51 AM

Page 2

Item ID: D4380-7
Revision ID: PRELIM
Item Name: Cover, Safety Hard Point

Accept

Setup Start

Stop

Start Date: 4/5/2011 Start Qty: 2.00
Required Date: 4/5/2011 Req'd Qty: 2.00

Cust Item ID:


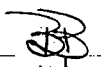




Customer:

Reference:

Run Start

Stop

Approvals: Process Plan: Date: Tooling: Date:
QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110  Thermoform Thermoforming Machine	Memo 1-Machine Set-Up 2-Pre-heat Tool to required temp. 3-Thermoform as per Dwg and Folio #FTA13 using tool DT9738 Dwg Rev: <u>4380-7</u> Folio Rev: <u>A</u>	0.00 0.00				2			 11/04/05
120  QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo Visually inspect part for proper formation and texture	0.00 0.00				2			 11/04/05
130  QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				2			 11/04/05

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 67990

Tuesday, April 05, 2011 10:42:51 AM

Page 3

Item ID: D4380-7

Accept

Revision ID: PRELIM

Item Name: Cover, Safety Hard Point

Setup Start

Stop

Start Date: 4/5/2011 Start Qty: 2.00

Required Date: 4/5/2011 Req'd Qty: 2.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140



HandThermo

Memo

0.00

0.00

Hand Finishing Thermoforming

1-Trim to finished dimensions as per Dwg

7

11/04/05

150



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

Complete FAI document

0.00

0.00

2

11/04/05

160



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

- inspect to Part
Dim only

Enlow/06

CR

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 67990

Tuesday, April 05, 2011 10:42:51 AM



Page 4

Item ID: D4380-7
Revision ID: PRELIM
Item Name: Cover, Safety Hard Point

Accept



Setup Start



Stop



Start Date: 4/5/2011 Start Qty: 2.00
Required Date: 4/5/2011 Req'd Qty: 2.00



Cust Item ID:
Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

170

Identify as per dwg & Stock Location: *RECALL*

0.00



Packaging

Memo

0.00

Packaging

Recall 4/6 @

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

*RD2370**11/5/16***POSITIVE RECALL**

EFFECTIVE

11/24/05

AUTH

u

RELEASED

AND

DATE

*11/05/13**-04-06*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, April 05, 2011 10:42:47 AM

Page 1

Work Order ID: 67990



Parent Item: D4380-7



Parent Item Name: Cover, Safety Hard Point

Start Date: 4/5/2011

Required Date: 4/5/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: Rev. A New Issue 11/04/04 DL verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MKYD6185S.080-P3- 62015		Purchased		No		100	sf	787.2912	3.46875	6.9375			



6185 KYDEX .080"



Location

Loc Qty

Loc Code

therm

787.2912

787.2912

116576

6.9375 sg

DL
11/04/04

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 67990
Description: COVER SAFETY HARD POINT		Part Number: 4380-2
Inspection Dwg:	Rev:	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST
THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than _____"	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: <i>JB</i>	Date: _____
-------------------------------	--------------------

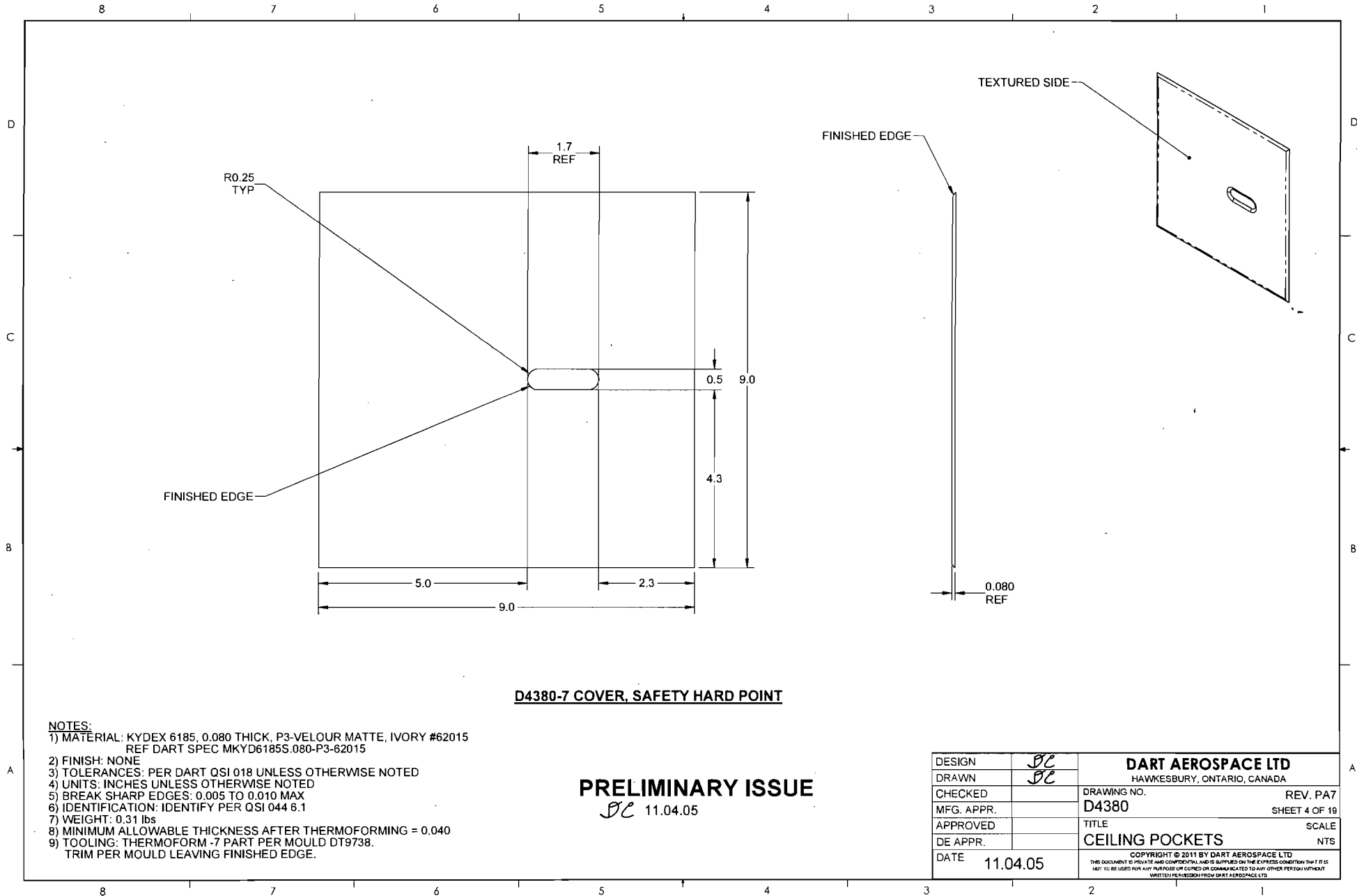
TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
9.0"	±.100"	9.0	✓		TH.05	
9.0"	±.100"	9.0	✓		TH.05	
.5"	±.100"	.5	✓		TH.05	
4.3"	±.100"	4.25	✓		TH.05	
2.3"	±.100"	2.25	✓		TH.05	

Measured by: <i>JB</i>	Date: 11/05/05
Audited by: <i>J to 147 Day</i>	Date: 11/22/06
Preliminary Approval: _____	Date: _____

Rev	Date	Change	Revised by	Approved
B	10.04.14	Added preliminary approval	KJ	

10.04.14



D4380-7 COVER, SAFETY HARD POINT

NOTES:

- 1) MATERIAL: KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015
REF DART SPEC MKYD6185S.080-P3-62015
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.31 lbs
- 8) MINIMUM ALLOWABLE THICKNESS AFTER THERMOFORMING = 0.040
- 9) TOOLING: THERMOFORM -7 PART PER MOULD DT9738.
TRIM PER MOULD LEAVING FINISHED EDGE.

PRELIMINARY ISSUE

DL 11.04.05

DESIGN	<i>DL</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>DL</i>		
CHECKED		DRAWING NO. D4380	REV. PA7 SHEET 4 OF 19
MFG. APPR.		TITLE CEILING POCKETS	SCALE NTS
APPROVED		COPYRIGHT © 2011 BY DART AEROSPACE LTD. <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	
DE APPR.			
DATE	11.04.05		

Daryl Leger

From: Daniel Campbell <dcampbell@dartaero.com>
Sent: Saturday, April 02, 2011 5:44 PM
To: 'Daryl Leger'
Cc: 'Eric Charbonneau'; 'JEANLUC MENARD'; 'Linda Lacelle'; Bill Beckett; 'Harvey Siemens';
'David Shepherd'
Subject: D4380 Issues

Hi Daryl,

Please see D4380-PA6 in the Prelim folder.

Fortunately, the guys were still here and I talked to them about the manufacturing issues.

Based on their feedback, I have modified the D4380-17 cover. It should be a little easier to manufacture.

However, the -3/-5/-27/-29 need to stay as they are. Please use the "cheat the corners" technique to make the part as true to the drawing as possible. There are spare air conditioning vents here – we could fedex you one on Monday if that would help in creating the moulds.

The only thing I changed in the PA6 rev was the -17.

As for cutting out the "tops" of the round parts (-21/-23/-25 etc), it is up to you. If you would like to cut it out and trim it, that's ok, or the guys here can do that.

Thanks Daryl,

Daniel Campbell
Mechanical Engineer
DART Aerospace Ltd.

P: 403-717-0325
F: 403-717-1288
E: dcampbell@dartaero.com
W: www.dartaero.com
M: 1060 McTavish Road, NE, Calgary, Alberta, T2E 7G6

The information contained in this transmission is privileged and confidential and intended only for the use of the individual or entity to whom it is addressed. If you are not the intended recipient, you are hereby notified that any distribution, copying, disclosure or taking of any action in reliance on the contents of this transmission is strictly prohibited and review by any individual other than the intended recipient shall not constitute waiver of privilege. If you have received this transmission in error, please notify me immediately and delete the original transmission.

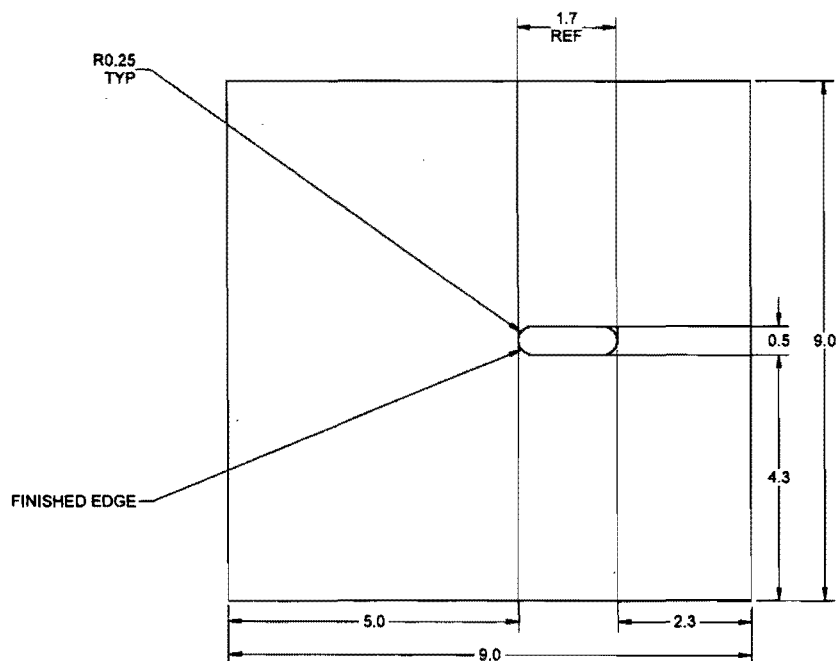
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

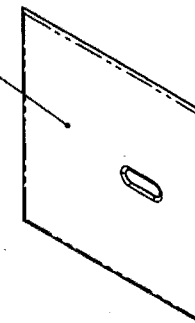
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



FINISHED EDGE

TEXTURED SIDE



0.080
REF

67990

RELEASED
2011-05-10

D4380-7 COVER, SAFETY HARD POINT

NOTES:

- 1) MATERIAL: KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015
REF DART SPEC MKYD6185S.080-P3-62015
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.4
- 7) WEIGHT: 0.31 lbs
- 8) MINIMUM ALLOWABLE THICKNESS AFTER THERMOFORMING = 0.040
- 9) TOOLING: THERMOFORM PER MOULD DT9738 AND DART QSI 022
- 10) TRIM PER MOULD LEAVING FINISHED EDGE

DESIGN	DC	DART AEROSPACE LTD	
DRAWN	DC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	DC	D4380	SHEET 4 OF 19
APPROVED	DC	TITLE	SCALE
DE APPR.	DC	CEILING POCKETS	NTS
DATE	11.04.21	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OTHER THAN THAT FOR WHICH IT WAS SUPPLIED WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

